

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

- 1-12. (canceled)
13. (currently amended) A method of screening to identify a gene whose function is unknown previously as a target for drug development, which comprises:
- (a) examining the expression of an mRNA mRNAs and/or expression sequence tag tags being a product products of gene expression before and after an event by using a high-density oligonucleotide array, and making a scatter diagram showing changes in expression levels of the mRNAs and/or expression sequence tags between before and after the event,
 - (b) determining those one or more specific mRNA mRNAs and/or expression sequence tags whose expression has changed in response to the event, from the results in the scatter diagram and from databases searches,
 - (c) for each of said one or more mRNAs and/or expression sequence tags whose expression has changed in response to the event, designing a probe that will specifically hybridize with the mRNA and/or expression sequence tag whose expression has changed in response to the event,
 - (d) performing *in situ* hybridization of a tissue or cell sample at least two types of tissues or cells of an organism before and after the event by using the one or more probe probes designed in step (c),
 - (e) examining the localization of the one or more mRNA mRNAs and/or expression sequence tag tags in the tissue tissues or cell cells before and after the event,
 - (f) determining whether the localization of those mRNA mRNAs and/or expression sequence tags whose localization has changed in response to the event, and
 - (g) identifying those mRNA mRNAs and/or expression sequence tags whose expression and localization have both changed in response to the event as targets a target for drug development;
- ~~wherein the function of the gene and/or expression sequence tag is unknown before~~

~~screening~~.

14. (previously presented) The method according to claim 13, wherein the mRNA and/or expression sequence tag is expressed in cultured cells or tissue.

15. (canceled)

16. (currently amended) The method according to claim 13, wherein the gene encoding the mRNA and/or expression sequence tag has been cloned.

17. (currently amended) The method according to claim 13, wherein the localization and expression of at least two types of different mRNAs and/or expression sequence tags ~~are is~~ determined in ~~one type of tissue or cell in~~ a single screening of the tissue or cell.

18. (canceled)

19. (previously presented) The method according to claim 13, wherein the gene encodes a substance effective as a drug.

20. (previously presented) The method according to claim 13, wherein the gene is related to a disease.

21. (currently amended) The method according to claim 13 further comprising, after step (g), the step of determining the function of the gene.

22. (currently amended) The method according to claim 13, wherein the tissue or cell ~~sample~~ is collected from an organism at two or more different points in time after occurrence of an event.

23. (currently amended) The method according to claim 13 or ~~21~~ 22, wherein the event is ischemia or cancer.